

AMENDMENTS TO THE DRAWINGS

Applicants respectfully present herewith replacement Figures 1, 1A, 2A which includes the desired changes, without markings, and which comply with §1.84. The changes made to Figures 1, 1A, 2A are explained in the accompanying remarks section below.

REMARKS

The Office Action dated July 27, 2005, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

By this Amendment, claims 1-9 were amended, claim 10 was canceled and new claim 11 was added. No new matter was added. Claims 1-9 and 11 are pending in the present application.

Allowable Subject Matter

The Applicants appreciate the indication of allowable subject matter in claims 1-6, and that these claims would be allowed if rewritten to overcome the formal rejections.

It is respectfully submitted that claims 1-6 have been amended to obviate the formal rejection of the claims, and therefore claims 1-6 are in compliance with U.S. patent practice, and allowable.

Drawing Objection

The drawings were objected to as failing to comply with 37 CFR § 1.83(a) because the drawings failed to show every feature recited in the claims. Applicants respectfully present replacement Figs. 1, 1A and 2A where node N5 corresponds to “an inverted input terminal” and node N6 corresponds to “a non-inverted input terminal,” which comply with § 1.84. Accordingly, Applicants request approval of the drawing changes, and the objection to be withdrawn.

Claim Objections and Claims Rejected Under 35 U.S.C. § 112

Claims 1-6 were objected to as containing some informalities. Claims 1-6 have been amended to obviate this objection.

In addition, claims 1-10 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claims 1-9 have been amended to and a replacement Figure 1 has been submitted to obviate this rejection.

Hence, Applicants respectfully request withdrawal of the objection and rejection.

Claims 7-10 Rejected Under 35 U.S.C. § 102(b)

Claims 7-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kokubun et al. (U.S. Patent No. 6,448,846, hereinafter "Kokubun"). This rejection is respectfully traversed. Claim 10 has been canceled and therefore the rejection of this claim is now moot.

In making the rejection, the Office Action took the position that,

Kokubun et al. (Fig. 9) disclose an exact structure as applicant's invention (FIGURE 3) comprising: operational amplifier for amplifying the input signal(s) (IN); and a switch section (SW1/SW2/SW3/SW6) for selecting and switching to operational amplifiers in amplification operation by receiving inputs of the input signals, the switch section switching every output period, wherein offset cancellation is made on operational amplifier(s) not selected during the output period. ...Kokubun et al (Fig. 6) also disclose operational amplifiers. Regarding claim 8, Kokubun et al. (Fig. 17) disclose additional operational amplifiers and switch sections. Regarding claim 10, wherein reference voltage to be used in the offset voltage fetch operation, either input voltage prior to the offset voltage fetching operation or output voltage after offset voltage cancel operation prior to the offset fetching operation is used.

Applicants respectfully disagree with the Office Action's characterization of Kokubun, and therefore traverse the rejection.

As for claim 7, it is submitted that the switches SW1/SW2/SW3/SW6 of Kokubun (Fig. 9), taken alone or together, is neither comparable nor analogous to the "switch section" as recited claim 7 of the present application. In one example of the present

invention, the claimed feature of the “switch section” recited in claim 7 corresponds to switches SI1 to SI6 and SO1 to SO6 illustrated in Fig. 4 of the application. In contrast, SW1/SW2/SW3/SW6 as provided in Kokubun in Fig. 9 are merely “a first switch/a second switch/a third switch/a fifth switch.”

Accordingly, Applicants submit that Kokubun fails to disclose or suggest each and every element recited in claim 7 the present application. In particular, it is submitted that Kokubun fails to disclose or suggest at least the limitations of “a switch section for selecting to the operational amplifiers in which the input signals are not input, the switch section switching every output period, wherein offset cancellation is made on operational amplifier in which the input signals are not input.” Therefore, Applicants submit that Kokubun fails to disclose each and every element recited in claim 7 the present application.

As for the rejection of claim 8, the Office Action noted Kokubun in Fig. 17 discloses “operational amplifiers” and “switch sections” as recited in claim 8 of the present application. However, it is submitted that the feature of the “switch section” as recited in claim 8 is, in one example of the present invention, to input the input signal into any one of the two operational amplifiers. In contrast, the alleged “switch section” in Kokubun in Fig. 17 is merely to control output of the operational amplifier.

Further, the “switch section” of claim 8, for example, selectively causes output of one of the two operational amplifiers (single output). In contrast, the alleged “switch section” of Kokubun merely causes output of both the two operational amplifiers (double output).

Moreover, the “operational amplifiers” as recited in claim 8 include that the number of the operational amplifiers is larger by one than the number of the input signal. However, the alleged “operational amplifiers” of Kokubun, are neither comparable nor analogous to the claimed “operational amplifiers” of the present invention since the number of the operational amplifiers of Kokubun is equal to the number of the input signal.

It is further submitted that claim 8 provides at least the advantage of not having “to provide the offset cancel preparatory period separately prior to each of the output periods on every one horizontal period and it is no more necessary to incorporate the offset cancel preparatory period in the output period, so that one horizontal period can be shortened further.” (See, page 36, lines 15-29 of the present application). In contrast, Kokubun merely suggests that “[B]y performing this operation during the video blanking period, the adverse effect of the offset cancel operation can be avoided during the video period.” (See, col. 12, lines 17-27 of Kokubun).

Thus, Applicants submit that Kokubun fails to disclose or suggest each and every element recited in claim 8 of the present application. In particular, it is submitted that Kokubun fails to disclose or suggest at least the limitations of “operational amplifiers ...” and “switch sections ...” and therefore Kokubun fails to disclose each and every element recited in claim 8 of the present application.

Regarding the rejection of claim 9, Applicants submit that Kokubun fails to disclose or suggest each and every element recited in claim 9 for at least the reasons provided above with respect to claims 7 and 8.

Moreover, in order to qualify as prior art under 35 U.S.C. §102, a single prior art reference must teach, i.e., identically describe, each feature of a rejected claim. As explained above, Kokubun fails to disclose or suggest each and every feature of claims 7, 8 and 9. Accordingly, Applicants respectfully submit that claims 7, 8 and 9 are not anticipated by nor rendered obvious by the disclosure of Kokubun. Therefore, Applicants respectfully submit that claims 7, 8 and 9 are allowable.

Accordingly, Applicants respectfully request withdrawal of the rejection.

New Claim 11

New claim 11 has been added. It is submitted that claim 11 is distinguishable from the cited prior art and therefore is allowable.

Conclusion

In view of the above, the Applicants respectfully request withdrawal of the rejections of the claims, allowance of claims 1-9 and 11, and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper,

may be charged to counsel's Deposit Account No. 01-2300, referencing Attorney Docket No. 024016-00078.

Respectfully submitted,



Sam Huang
Attorney for Applicants
Registration No. 48,430

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810

SH:ksm

Enclosures: Replacement Figures 1, 1A and 2A